(FILE 'HOME' ENTERED AT 10:50:11 ON 15 OCT 2003)

FILE 'CAPLUS, USPATFULL' ENTERED AT 10:50:28 ON 15 OCT 2003

L1	4028	S	THERMAL? (P) BROMIN?
L2	2701	S	L1 AND BROMINE
L3	647	S	L2 AND ?BENZYL?
L4	443	S	L3 AND ?TOLUENE
L5	219	S	L4 AND BROMIDE
L6	180	S	L5 AND AROMATIC
L7	41	S	L5 AND HYDROGEN BROMIDE
L8	23	S	L7 AND BROMINATION
L9	13	S	L8 AND HEAT
L10	13	DUP REM	L9 (0 DUPLICATES REMOVED)
L11	46	S	THERMAL BROMINATION
L12	21	S	L11 AND BROMINE
L13	20	S	L12 NOT L10
L14	5	S	L13 AND ?BENZYL?
L15	15	S	L13 NOT L14
L16	20	DUP REM	L13 (0 DUPLICATES REMOVED)
L17	15	DUP REM	L15 (0 DUPLICATES REMOVED)

L14 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:435359 CAPLUS
DN 139:6671
TI Process for chemoselective thermal **benzylic** bromination
IN Mortensen, Max K.; Elnagar, Hassan Y.; Roy, Ranjit K.; Herndon, Robert C.; Allen, Robert H.; Caillet, David A.
PA USA
SO U.S. Pat. Appl. Publ., 7 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003105350	A1	20030605	US 2001-10404	20011205
	WO 2003055833	A1	20030710	WO 2002-US39291	20021205
	W: CA, JP				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
PRAI	US 2001-10404	A	20011205		

OS CASREACT 139:6671
AB A thermal **benzylic** bromination process for producing a **benzyl** bromide comprises: (A) contacting gaseous **bromine** with a reaction mixt. having an org., liq. phase initially comprising an (un)substituted arom. ring-contg. compd. bearing one **benzylic** carbon atom (e.g., p-bromotoluene), the total amt. of **bromine** used relative to the arom. compd. being 0.2-1.2 mol of **bromine** per mol of arom. compd.; (B) thoroughly dispersing the gaseous **bromine** into the liq. phase, such that localized **bromine** accumulation is suppressed; and (C) maintaining the temp. of the liq. phase at 100-170.degree. so as to be sufficient to effect **benzylic** bromination of said the **benzylic** Me group (e.g., producing p-bromobenyl bromide and p-bromobenzal bromide).

L14 ANSWER 3 OF 5 USPATFULL on STN
AN 2000:106109 USPATFULL
TI **Benzylic** halogenation of alkylbenzoic acid esters
IN Elnagar, Hassan Y., Baton Rouge, LA, United States
PA Albemarle Corporation, Richmond, VA, United States (U.S. corporation)
PI US 6103926 20000815
AI US 1999-266879 19990312 (9)
DT Utility
FS Granted
EXNAM Primary Examiner: Killos, Paul J.
LREP Spielman, Jr., E. E.
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 793
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Direct preparation of **benzylically** halogenated alkylbenzoic acid ester from an alkylbenzoic acid ester in which the alkyl group is a primary or secondary alkyl group is carried out. The ester group of the starting ester (i) is devoid of non-aromatic unsaturation and (ii) if an aromatic group, is devoid of ring substitution that would undergo **benzylic** halogenation. The process comprises slowly feeding halogen continuously and/or intermittently to an agitated solution of the alkylbenzoic acid ester in a liquid halogen-containing solvent maintained at a thermal halogenation temperature such that when the alkyl group of the alkylbenzoic acid ester is a primary alkyl group and monohalogenation is desired, the total amount of halogen fed does not exceed about 0.8 mole of halogen per mole of alkylbenzoic acid ester. If the alkylbenzoic acid ester is a toluic acid ester and dihalogenation is desired, the amount of halogen fed is over 1 mole but no more than about 1.8 moles per mole of the toluic acid ester. Ester cleavage is minimized and other advantages are made possible.

L14 ANSWER 5 OF 5 USPATFULL on STN
AN 82:19080 USPATFULL
TI Thermal process for preparing 3-**phenoxybenzyl** bromide
IN Keblys, Kestutis A., Southfield, MI, United States
PA Ethyl Corporation, Richmond, VA, United States (U.S. corporation)
PI US 4326089 19820420
AI US 1977-836428 19770926 (5)
DT Utility
FS Granted
EXNAM Primary Examiner: Helfin, Bernard
LREP Johnson, Donald L., Odenweller, Joseph D., Hunt, John F.
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 251
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Reaction of 3-phenoxytoluene with **bromine** at elevated temperature yields 3-**phenoxybenzyl** bromide, 3-phenoxybenzal bromide, or a mixture thereof. In contrast to teachings of the prior art, phosphorus halide catalysis or u.v. activation is not required to achieve a desirable amount of side-chain bromination with a minimum of nuclear halogenation. For example, it was observed that at 265.+-.5.degree. C., good yields of the desired **benzyl** and benzal bromide were obtained, but no nuclear halogenated by-product was detected by gas chromatography.

L17 ANSWER 9 OF 15 USPATFULL on STN
AN 82:55570 USPATFULL
TI Process for preparing **bromine**- and fluorine-containing halogenated hydrocarbons
IN Bohm, Horst, Hanover, Germany, Federal Republic of
Rudolph, Werner, Hanover, Germany, Federal Republic of
Massonne, Joachim, Hanover, Germany, Federal Republic of
PA Kali-Chemie AG, Hanover, Germany, Federal Republic of (non-U.S. corporation)
PI US 4359371 19821116
AI US 1980-211922 19801201 (6)
RLI Continuation of Ser. No. US 1977-810564, filed on 27 Jun 1977, now abandoned
PRAI DE 1976-2629775 19760702
DT Utility
FS Granted
EXNAM Primary Examiner: Demers, Arthur P.
LREP Schwartz, Jeffery, Schwaab, Mack, Blumenthal & Koch
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 428
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A process for brominating fluorine-containing halogenated hydrocarbons is disclosed which comprises the step of reacting at least one halogenated fluorohydrocarbon compound of formula (I) ##STR1## wherein R.sub.1 represents hydrogen, fluorine, chlorine, **bromine** or a lower alkyl group which is perhalogenated by a halogen selected from the group consisting of fluorine, chlorine and **bromine**;

R.sub.2 represents hydrogen, fluorine, chlorine, or **bromine**, and;

R.sub.3 represents fluorine or perfluorinated lower alkyl, in gaseous form with **bromine** under irradiation with light having a wavelength from about 250 nm to about 600 nm in the presence of an active amount of chlorine not exceeding about 2 moles per mole of **bromine** at a reaction temperature not exceeding 300.degree. C., which is sufficient for transforming the reactants into sufficiently stable gaseous compounds and for substituting the hydrogen in a compound of formula (I) by **bromine** to form a compound of formula (II) ##STR2## wherein R.sub.1, R.sub.2 and R.sub.3 are as defined above.

L17 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1954:42330 CAPLUS
DN 48:42330
OREF 48:7563b-e
TI Bromination of hydrocarbons. VI. Photochemical and **thermal bromination** of toluene. Bond dissociation energies
AU Anderson, Herbert R., Jr.; Scheraga, Harold A.; VanArtsdalen, Ervin R.
CS Cornell Univ., Ithaca, NY
SO Journal of Chemical Physics (1953), 21, 1258-67
CODEN: JCPSA6; ISSN: 0021-9606
DT Journal
LA Unavailable
AB cf. C.A. 36, 6849.6; 46, 2410b; 48, 5618a. Infrared analyses showed that the reaction between PhMe and Br is predominantly a side-chain substitution, the products being PhCH2Br and HBr. In the temp. range 82-132.degree. the photochem. reaction was strongly inhibited by HBr. The thermal reaction was studied in the absence of added HBr at 166.degree.. Except for the step involving the dissocn. of Br mols., both the photochem. and thermal mechanisms involved the same type of atom and radical chain as found in the bromination of simple alkanes. The corrected activation energy of the over-all reaction, as detd. from the temp. coeff. of the photochem. reaction, was 7.2 kcal./mole. This value was assigned to the rate-detg. step Br + RH : R + HBr. From the temp. dependence of the HBr inhibition, the activation energy for the reverse of this step was assigned the value 5.0 kcal./mole, which permits the C-H bond dissocn. energy in the alkyl side chain of PhMe to be estd. at 89.5 kcal./mole at room temp. The discrepancy between this and Szwarc's (C.A. 42, 2825i) value of 77.5 kcal./mole from pyrolysis studies is discussed. The efficiency of PhMe as a 3rd body in the homogeneous recombination of Br atoms, and also problems relating to steric effects in atom and radical reactions, are discussed. A description is given of a high-temp., high-vacuum, corrosion-resistant valve for use with Br and HBr.